

Remarks

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing Amendment, claims 1-15 are pending in the application, with claims 1 and 8 being the independent claims. Claims 1 and 5 are sought to be amended. These changes are believed to introduce no new matter, and their entry is respectfully requested.

Based on the foregoing amendments and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding rejections and that they be withdrawn.

Rejections Under 35 U.S.C. § 103

Claims 1-5, 8, 10, 12, 13

The Examiner rejected claims 1-5, 8, 10, 12 and 13 under 35 U.S.C. 103(a) as being unpatentable over U.S. Publication No. 2002/0064155 to Yen et al. ("Yen") in view of U.S. Patent No. 6,714,589 to Cole ("Cole"). Applicants have carefully considered the Examiner's remarks but, for the reasons set forth below, respectfully traverse.

Independent claim 1 is directed to a system for changing one or more physical layer communications parameters as configured in a physical layer device. Among other features, the system of claim 1, as presently amended, includes "a serial interface that stores the parameters in advance of sending the parameters to the physical layer device, stores a predetermined changeover time; and sends the parameters to the physical layer device at the predetermined changeover time."

Yen does not teach or suggest this feature of claim 1. Yen describes a PHY signal control device and a method to selectively generate a specific warning data to a MAC device. *See* Abstract of Yen. According to Yen, "a PHY apparatus . . . detects changes of the external transmission, updates itself and, meanwhile notifies the MAC device to update the transmission configuration." *See* Yen at paragraph [0009]. The PHY apparatus alerts the MAC device only if the external transmission configuration has changed. *Id.*

Yen does not describe a serial interface (or any other interface for that matter) that stores a predetermined changeover time and then sends communication parameters to a physical layer device at the predetermined changeover time as recited in claim 1. Rather, in the system described by Yen, the PHY apparatus itself detects a change in external transmissions and then updates its own configuration accordingly. *See* Yen at paragraph [0009]. Since Yen's PHY apparatus internally updates its own configuration, Yen cannot possibly teach or suggest a physical layer device that receives communication parameters from an external interface as recited in claim 1. Furthermore, in Yen, the PHY apparatus updates its configuration only when a change in external transmissions is detected, not in accordance with a stored predefined changeover time as recited in claim 1.

It should be noted that Yen does teach that the PHY apparatus sends a warning to the MAC device upon a change in the PHY apparatus transmission configuration, and that the MAC device updates its configuration accordingly. However, this is in some sense the exact opposite of what is recited in claim 1, in that in claim 1 an external entity is sending communication parameters to a physical layer device, whereas in Yen, a

physical layer device (i.e., the PHY apparatus) is sending data relating to communication parameters to an external entity (i.e., the MAC device).

Cole fails to supply the missing teachings of Yen with respect to claim 1. Cole essentially describes a handshake protocol between a first modem and a second modem. In accordance with the handshake protocol, the first modem transmits a request to change one of its operating parameters to the second modem. The second modem receives the request and sends a primitive synchronization signal to the first modem. In response to receiving the synchronization signal, the first modem modifies a physical layer operating parameter. *See* Summary of Cole.

In Cole, unlike claim 1, the modification of physical layer parameters occurs only upon receiving a primitive synchronization signal and not at a predetermined changeover time. In particular, Cole states that "[a] physical layer operating parameter of the modem 100 is modified in response to identifying the primitive synchronization signal in block 320." *See* Cole at col. 8, lines 5-7. Since Cole changes a physical layer operating parameter only upon the detection of the primitive synchronization signal (the timing of which is arbitrary), it does not teach or suggest storing "a predetermined changeover time" in a serial interface or sending communication parameters to a physical layer device at the predetermined changeover time as recited in independent claim 1.

Since Yen and Cole, alone or in combination, do not teach or suggest every limitation of independent claim 1, they cannot render that claim obvious. Claims 2-5 are also not rendered obvious by Yen and Cole for the same reasons as independent claim 1 from which they depend and further in view of their own respective features.

Accordingly, the Examiner's rejection of claims 1-5 under 35 U.S.C. § 103(a) is traversed and Applicants respectfully request that this rejection be withdrawn.

Independent claim 8 recites a method of changing one or more physical layer communication parameters in a physical layer device. Among other features, the method includes "storing the parameters in a serial interface", "receiving a point in time at which the parameters are to changeover", "storing the changeover point in the serial interface" and "at the changeover point, writing the parameters to the physical layer device."

Applicants respectfully submit that neither Yen nor Cole teach these features of independent claim 8, for at least the reasons described above with respect to independent claim 1. Since Yen and Cole, alone or in combination, do not teach or suggest every limitation of independent claim 8, they cannot render that claim obvious. Claims 10, 12 and 13 are also not rendered obvious by Yen and Cole for the same reasons as independent claim 8 from which they depend and further view of their own respective features. Accordingly, the Examiner's rejection of claims 8, 10, 12 and 13 under 35 U.S.C. § 103(a) is traversed and Applicants respectfully request that this rejection be withdrawn.

Claims 6, 7, 9, 11, 14 and 15

The Examiner rejected claims 6, 7, 9, 11, 14 and 15 under 35 U.S.C. 103(a) as being unpatentable over Yen in view of Cole and further in view of U.S. Patent Application Publication No. 2002/0093935 to Denney *et al.* ("Denney"). For the reasons set forth below, Applicants respectfully traverse this rejection.

As described above, Yen and Cole do not teach or suggest each and every feature of independent claim 1. Denney does not supply the teachings missing from Yen and

Cole with respect to claim 1. Thus, claims 6 and 7, which depend from independent claim 1, are patentable over Yen, Cole and Denney for at least the reasons provided above, and further in view of their own respective features. Applicants therefore respectfully request that the Examiner reconsider and withdraw the rejection of claims 6 and 7.

As also described above, Yen and Cole do not teach or suggest each and every feature of independent claim 8. Denney does not supply the teachings missing from Yen and Cole with respect to claim 8. Thus, claims 9, 11, 14 and 15, which depend from independent claim 8, are patentable over Yen, Cole and Denney for at least the reasons provided above, and further in view of their own respective features. Applicants therefore respectfully request that the Examiner reconsider and withdraw the rejection of claims 9, 11, 14 and 15.

Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Thomas C. Fiala
Attorney for Applicant
Registration No. 43,610

Date: September 26, 2005

1100 New York Avenue, N.W.
Washington, D.C. 20005-3934
(202) 371-2600

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